1. A method of process control comprising:

providing a plurality of tools and a plurality of products to be run on said tools;

calculating a desired recipe for each product on each tool based on a previous recipe used for each product on each tool and deviation of a parameter from a target value;

thereafter running said plurality of products on said plurality of tools; and

updating said desired recipe after each run of each tool.

2. The method according to Claim 1 wherein each said desired recipe is calculated for known said previous recipes and said parameters.

3. The method according to Claim 1 wherein for unknown said previous recipes and said parameters, each said desired recipe is estimated using an expectation maximization algorithm.

4. The method according to Claim 1 wherein said step of updating said desired recipe is performed in gradual mode if said deviation of said parameter from said target value is less than about 1-2 sigma.

5. The method according to Claim 1 wherein said step of updating said desired recipe is performed in rapid mode if said deviation of said parameter from said target value is more than about 3 sigma.

6. A method of process control of a photolithography process comprising:

providing a plurality of photolithography tools and a plurality of products to be run on said photolithography tools;

calculating a desired energy for each product on each photolithography tool based on a previous energy used for each product on each tool and deviation of a critical dimension from a target value;

thereafter running said plurality of products on said plurality of photolithography tools; and

updating said desired energy after each run of each photolithography tool.

7. The method according to Claim 6 wherein each said desired energy is given by said previous energy + slope x (critical dimension - target) where slope is a constant variable assigned by a user.

8. The method according to Claim 7 wherein for unknown values for said previous energy and said critical dimension, said desired energy is estimated using an expectation maximization algorithm.

9. The method according to Claim 6 wherein said step of updating said desired recipe is performed in gradual mode if said deviation of said parameter from said target value is less than about 1-2 sigma.

10. The method according to Claim 6 wherein said step of updating said desired recipe is performed in rapid mode if said deviation of said parameter from said target value is more than about 3 sigma.

11. A method of process control comprising:

in a first phase running off-line:

providing a plurality of tools and a plurality of products to be run on said tools; and

calculating a desired recipe for each product on each tool based on a previous recipe used for each product on each tool and deviation of a parameter from a target value; and

in a second phase running in real-time:

running said plurality of products on said plurality of tools; and

updating said desired recipe after each run of each tool.

12. The method according to Claim 11 wherein each said desired recipe is calculated for known said previous recipes and said parameters.

13. The method according to Claim 11 wherein for unknown said previous recipes and said parameters, each said desired recipe is estimated using an expectation maximization algorithm.

14. The method according to Claim 11 wherein said step of updating said desired recipe is performed in gradual mode if said deviation of said parameter from said target value is less than about 1-2 sigma.

15. The method according to Claim 11 wherein said step of updating said desired recipe is performed in rapid mode if said deviation of said parameter from said target value is more than about 3 sigma.